# This Page Is Inserted by IFW Operations and is not a part of the Official Record

### **BEST AVAILABLE IMAGES**

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

### IMAGES ARE BEST AVAILABLE COPY.

As rescanning documents will not correct images, please do not report the images to the Image Problem Mailbox.

1581/00212

As a below-named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

Method of Scattering Fine Particles, Method of Manufacturing Liquid Crystal Display, Apparatus for Scattering Fine Particles, and Liquid Crystal Display

the specification of which: (check one)

[ ] is attached hereto.

[XX] was filed on March 3, 1999, as United States Patent Application Serial No. or PCT International Application Number PCT/IP99/01021, and was amended on \_\_\_\_\_\_\_19\_\_ (if applicable).

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to the patentability of this application in accordance with 37 CFR § 1.56(a).

Prior Foreign Application(s): I hereby claim foreign priority benefits under 35 U.S.C. § 119(a)-(d) or §365(b) of any foreign application(s) for patent or inventor's certificate listed below, or § 365(a) of any PCT international application which designated at least one country other than the United States of America, listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed:

			Priority	Claimed
10/50748	<b>Japan</b>	3/March/1998	[XX]	[]
(Application No.)	(Country)	(Day/Month/Year Filed)	YES	NO
10/85401	Japan	31/March/1998	[XX]	[]
(Application No.)	(Country)	(Day/Month/Year Filed)	YES	NO
10/86620	Japan	31/March/1998	[XX]	[]
(Application No.)	(Country)	(Day/Month/Year Filed)	YES	NO
10/317722	Japan	9/November /1998	[XX]	[]
(Application No.)	(Country)	(Day/Month/Year Filed)	YES	NO
10/356738	Japan	15/December /1998	[XX]	[]
(Application No.) " -	(Country)	(Day/Month/Year Filed)	YES	NO
(pp)	(,,-)/	, ,		

I hereby claim the benefit under Title 35, United States Code § 119(e) of any United States provisional application(s) listed below:

I hereby claim the benefit under 35 U.S.C. § 120 of any United States application(s) listed below or 34 U.S.C. § 365(c) of any PCT International Application designating the United States of America listed below, and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application or PCT application in the manner provided by 35 U.S.C. § 112, first paragraph, I acknowledge the duty to disclose material information as defined in 37 CFR § 1.56(a) which occurred between the filing date of the prior application and the national or PCT international filing date of this application:

I hereby appoint George Vande Sande, Registration No. 17,276; Burton A. Amernick, Registration No. 24,852; Richard Wiener, Registration No. 18,741; Townsend M. Belser, Jr., Registration No. 22,956; Morris Liss, Registration No. 24,510; Martin Abramson, Registration No. 25,787; George R. Pettit, Registration No. 27,369; Elzbieta Chlopecka, Registration No. 32,767; Eric J. Franklin, Registration No. 37,134; and William E. Curry, Registration No. 43,572, my attorneys with full power of substitution and revocation, to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith.

Send Correspondence and Direct Telephone Calls to: Burton A. Amernick (202) 331-7111 Burton A. Amernick Pollock, Vande Sande & Amernick, R.L.L.P. P.O. Box 19088 Washington, D.C. 20036-3425 U.S.A.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements are made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. § 1001 and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full name of sole or first invent	
Inventor's Signature	Ramuja (Ochemucra Date OCT. 1 2.2000 c/o Sharp Kabushiki Kaisha, 22-22, Nagaike-cho, Abeno-ku, Osaka-
Residence Address	c/o Sharp Kabushiki Kaisha, 22-22, Nagaike-cho, Abeno-ku, Osaka- shi, Osaka 545-8522 Japan
Citizenship	Japan
Post Office Address [XX] See next pag	Same as above , refer to additional inventors





Full name of second joint inve	ntor(ifany) <u>Makoto Nakahara</u>
Inventor's Signature	makata Nakahara Date OCT. 12.2000
Residence Address	c/o Sharp Kabushiki Kaisha, 22-22, Nagaike-cho, Abeno-ku, Osaka- shi, Osaka 545-8522 Japan
Citizenship	Japan
Post Office Address	Same as above
Full name of third joint invent	or (if any) Takatoshi Kira
Inventor's Signature	Tokatoshi Kira Date OCT. 12.2000
Residence Address	c/o Sharp Kabushiki Kaisha, 22-22, Nagaike-cho, Abeno-ku, Osaka-
Academic Address	shi, Osaka 545-8522 Japan
Citizenship	Japan
Post Office Address	Same as above
Full name of fourth joint inver	ntor (if any) Daisuke Ikesugi
	Oct. 1 2. 2000
Inventor's Signature	d followith Applying Date
Residence Address	c/o Sharp Kabushiki Kaisha, 22-22, Nagaike-cho, Abeno-ku, Osaka- shi, Osaka 545-8522 Japan
Citizenship	Japan
Post Office Address	Same as above
Full name of fifth joint inventor	or(ifany) Akihiko Tateno
Inventor's Signature	Date
Residence Address	208 Ekuseri Katsura, 3, Kawashimahigashidaicho, Nishikyo-ku, Kyoto- shi, Kyoto 615-8101 Japan
Citizenship	Japan
Post Office Address	Same as above
Full name of sixth joint invent	or(ifany) Hiroyuki Nakatani
Inventor's Signature	Date
Residence Address	412 Alta Mira Gosho, 196, Otakicho, Shinmachidori Marutamachikudaru, Nakagyo-ku, Kyoto-shi, Kyoto 604-0092 Japan
Citizenship	Japan
Post Office Address	Same as above
Full name of seventh joint invo	entor (if any) Masaki Ban
Inventoria Ciarette	
Inventor's Signature	c/o Nisshin Flour Milling Co., Ltd., Technical Research
Residence Address	Laboratories, 3-1, Tsurugaoka 5-chome, Ohimachi, Iruma-gun, Saitama
•	356-0045 Japan
Citizenship	Japan
Post Office Address	Same as above



Full name of eighth joint invent	or(ifany) <u>Hiroshi Murata</u>		
Inventor's Signature	Date		
Residence Address	c/o Nisshin Engineering Co., Ltd., 14-1, Koamicho, Nihonbashi, Chuo-ku, Tokyo 103-8544 Japan		
Citizenship	Japan		
Post Office Address	Same as above		
Full name of ninth joint invento	r(ifany) <u>Masaaki Kubo</u>		
Inventor's Signature	Date		
Residence Address	c/o Nisshin Engineering Co., Ltd., 14-1, Koamicho, Nihonbashi,		
_	Chuo-ku, Tokyo 103-8544 Japan		
Citizenship	Japan		
Post Office Address	Same as above		



1581/00212

As a below-named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

Method of Scattering Fine Particles, Method of Manufacturing Liquid Crystal Display, Apparatus for Scattering Fine Particles, and Liquid Crystal Display

the specification of which: (check one)	the spe	cification	of which:	(check one)
---	---------	------------	-----------	-------------

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to the patentability of this application in accordance with 37 CFR § 1.56(a).

Prior Foreign Application(s): I hereby claim foreign priority benefits under 35 U.S.C. § 119(a)-(d) or §365(b) of any foreign application(s) for patent or inventor's certificate listed below, or § 365(a) of any PCT international application which designated at least one country other than the United States of America, listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed:

			Priority Clair	med
10/50748	Japan	3/March/1998	[XX]. :::: ·	[]
(Application No.)	(Country)	(Day/Month/Year Filed)	YES	NO
10/85401	Japan	31/March/1998	[XX]	[]
· (Application No.)	(Country)	(Day/Month/Year Filed)	YES	NO
10/86620	Japan	31/March/1998	[XX]	[]
(Application No.)	(Country)	(Day/Month/Year Filed)	YES	NO
10/317722	Japan	9/November /1998	[XX]	[]
(Application No.)	(Country)	(Day/Month/Year Filed)	YES	NO
10/356738	<b>Japan</b>	15/December /1998	[XX]	[]
(Application No.)	(Country)	(Day/Month/Year Filed)	YES	NO

I hereby claim the benefit under Title 35, United States Code § 119(e) of any United States provisional application(s) listed below:

I hereby claim the benefit under 35 U.S.C. § 120 of any United States application(s) listed below or 34 U.S.C. § 365(c) of any PCT International Application designating the United States of America listed below, and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application or PCT application in the manner provided by 35 U.S.C. § 112, first paragraph, I acknowledge the duty to disclose material information as defined in 37 CFR § 1.56(a) which occurred between the filing date of the prior application and the national or PCT international filing date of this application:

I hereby appoint George Vande Sande, Registration No. 17,276; Burton A. Amernick, Registration No. 24,852; Richard Wiener, Registration No. 18,741; Townsend M. Belser, Jr., Registration No. 22,956; Morris Liss, Registration No. 24,510; Martin Abramson, Registration No. 25,787; George R. Pettit, Registration No. 27,369; Elzbieta Chlopecka, Registration No. 32,767; Eric J. Franklin, Registration No. 37,134; and William E. Curry, Registration No. 43,572, my attorneys with full power of substitution and revocation, to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith.

Send Correspondence and Direct Telephone Calls to: Burton A. Amernick (202) 331-7111 Burton A. Amernick, Pollock, Vande Sande & Amernick, R.L.L.P.
P.O. Box 19088
Washington, D.C. 20036–3425 U.S.A.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements are made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. § 1001 and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full name of sole or first inver	tor Kazuya Yoshimura
Inventor's Signature	Date
Residence Address	c/o Sharp Kabushiki Kaisha, 22-22, Nagaike-cho, Abeno-ku, Osaka- shi, Osaka 545-8522 Japan
Citizenship	Japan
Post Office Address	Same as above





Full name of second joint inver	ntor (if any) Makoto Nakahara
Inventor's Signature	c/o Sharp Kabushiki Kaisha, 22-22, Nagaike-cho, Abeno-ku, Osaka-
Residence Address	shi, Osaka 545-8522 Japan
Citizenship	Japan Como ag above
Post Office Address	Same as above
Full name of third joint invento	or(ifany) Takatoshi Kira
Inventor's Signature	Date
Residence Address	c/o Sharp Kabushiki Kaisha, 22-22, Nagaike-cho, Abeno-ku, Osaka- shi, Osaka 545-8522 Japan
Citizenship	Japan
Post Office Address	Same as above
Full name of fourth joint inven	tor (if any) Daisuke Ikesugi
Inventor's Signature	Date
Residence Address	c/o Sharp Kabushiki Kaisha, 22-22, Nagaike-cho, Abeno-ku, Osaka- shi, Osaka 545-8522 Japan
Citizenship	Japan
Post Office Address	Same as above
Full name of fifth joint invento	Akibika T.+ 00T 12 2000
Residence Address	208 Ekuseri Katsura, 3, Kawashimahigashidaicho, Nishikyo-ku, Kyoto-
Residence Address	shi, Kyoto 615-8101 Japan
Citizenship	Japan
Post Office Address	Same as above
Full name of sixth joint invento	
Inventor's Signature	Marine Date OCT. 12. 2000
Residence Address	412 Alta Mira Gosho, 196, Otakicho, Shinmachidori Marutamachikudaru, Nakagyo-ku, Kyoto-shi, Kyoto 604-0092 Japan
Citizenship	Japan
Post Office Address	Same as above
Full name of seventh joint inve	ntor (if any) Masaki Ban
Inventor's Signature	Date:
Residence Address	c/o Nisshin Flour Milling Co., Ltd., Technical Research
Residence Address	Laboratories, 3-1, Tsurugaoka 5-chome, Ohimachi, Iruma-gun, Saitama 356-0045 Japan
Citizenship	Japan
Post Office Address	Same as above
•	



Full name of eighth joint inven	tor(ifany) Hiroshi Murata	
I Cimatura		
Inventor's Signature	Date	
Residence Address	c/o Nisshin Engineering Co., Ltd., 14-1, Koamicho, Nihonbashi, Chuo-ku, Tokyo 103-8544 Japan	
Citizenship	Japan	
Post Office Address Same as above		
Full name of ninth joint invente	or(ifany) Masaaki Kubo	
Inventor's Signature	Date	
Residence Address	c/o Nisshin Engineering Co., Ltd., 14-1, Koamicho, Nihonbashi, Chuo-ku, Tokyo 103-8544 Japan	
Citizenship	Japan	

Same as above

Post Office Address



1581/00212

As a below-named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

Method of Scattering Fine Particles, Method of Manufacturing Liquid Crystal Display, Apparatus for Scattering Fine Particles, and Liquid Crystal Display

the specification of which: (check one)

[ ] is attached hereto.

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to the patentability of this application in accordance with 37 CFR § 1.56(a).

Prior Foreign Application(s): I hereby claim foreign priority benefits under 35 U.S.C. § 119(a)-(d) or §365(b) of any foreign application(s) for patent or inventor's certificate listed below, or § 365(a) of any PCT international application which designated at least one country other than the United States of America, listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed:

			Priority Claimed	
10/50748	Japan	3/March/1998	[XX]	[]
(Application No.)	(Country)	(Day/Month/Year Filed)	YES	NO
10/85401	Japan	31/March/1998	[XX]	[]
(Application No.)	(Country)	(Day/Month/Year Filed)	YES	NO
10/86620	.Japan	31/March/1998	[XX]	[]
(Application No.)	(Country)	(Day/Month/Year Filed)	YES	NO
10/317722	Japan	9/November /1998	[XX]	[]
(Application No.)	(Country)	(Day/Month/Year Filed)	YES	NO
10/356738	Japan	15/December /1998	[XX]	[]
(Application No.)	(Country)	(Day/Month/Year Filed)	YES	NO

I hereby claim the benefit under Title 35, United States Code § 119(e) of any United States provisional application(s) listed below:

I hereby claim the benefit under 35 U.S.C. § 120 of any United States application(s) listed below or 34 U.S.C. § 365(c) of any PCT International Application designating the United States of America listed below, and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application or PCT application in the manner provided by 35 U.S.C. § 112, first paragraph, I acknowledge the duty to disclose material information as defined in 37 CFR § 1.56(a) which occurred between the filing date of the prior application and the national or PCT international filing date of this application:

I hereby appoint George Vande Sande, Registration No. 17,276; Burton A. Amernick, Registration No. 24,852; Richard Wiener, Registration No. 18,741; Townsend M. Belser, Jr., Registration No. 22,956; Morris Liss, Registration No. 24,510; Martin Abramson, Registration No. 25,787; George R. Pettit, Registration No. 27,369; Elzbieta Chlopecka, Registration No. 32,767; Eric J. Franklin, Registration No. 37,134; and William E. Curry, Registration No. 43,572, my attorneys with full power of substitution and revocation, to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith.

Send Correspondence and Direct Telephone Calls to:
Burton A. Amernick
(202) 331-7111

Burton A. Amernick
Pollock, Vande Sande & Amernick, R.L.L.P.
P.O. Box 19088
Washington, D.C. 20036–3425 U.S.A.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements are made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. § 1001 and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full name of sole or first inv	entor Kazuya Yoshimura
Inventor's Signature	Date
Residence Address	c/o Sharp Kabushiki Kaisha, 22-22, Nagaike-cho, Abeno-ku, Osaka- shi, Osaka 545-8522 Japan
Citizenship Post Office Address	Japan Same as above





Full name of second joint inven	tor(ifany) <u>Makoto Nakahara</u>
Inventor's Signature	Date
Residence Address	c/o Sharp Kabushiki Kaisha, 22-22, Nagaike-cho, Abeno-ku, Osaka-shi, Osaka 545-8522 Japan
Citizenship Post Office Address	Japan Same as above
Full name of third joint invento	r(ifany)Takatoshi Kira
Inventor's Signature	c/o Sharp Kabushiki Kaisha, 22-22, Nagaike-cho, Abeno-ku, Osaka-
Residence Address	c/o Sharp Kabushiki Kaisha, 22-22, Nagaike-Cho, Abeno-ku, Osaka shi, Osaka 545-8522 Japan
Citizenship	Japan
Post Office Address	Same as above
Full name of fourth joint inven	tor(ifany) Daisuke Ikesugi
Inventor's Signature	Date
Residence Address	c/o Sharp Kabushiki Kaisha, 22-22, Nagaike-cho, Abeno-ku, Osaka-
Residence Address	shi, Osaka 545-8522 Japan
Citizenship	Japan
Post Office Address	Same as above
Full name of fifth joint inventor Inventor's Signature Residence Address	Date
	shi, Kyoto 615-8101 Japan
Citizenship	Japan
Post Office Address	Same as above
Full name of sixth joint invent	or (if any) Hiroyuki Nakatani
Inventor's Signature	Date
Residence Address	412 Alta Mira Gosho, 196, Otakicho, Shinmachidori Marutamachikudaru, Nakagyo-ku, Kyoto-shi, Kyoto 604-0092 Japan
Citizenship	Japan
Post Office Address	Same as above
Full name of seventh joint inv	entor (if any) Masaki Ban
Inventor's Signature (4)	Masaki Ban Date OCT. 12. 2000
Residence Address	c/o Nisshin Flour Milling Co., Ltd., Technical Research Laboratories, 3-1, Tsurugaoka 5-chome, Ohimachi, Iruma-gun, Saitama 356-0045 Japan
Citizenship	Japan
Post Office Address	Same as above
1 Off Office Hadrons	





Full name of eighth joint inventor (if any) Hiroshi Murata	
run name of eighti joint invent	
Inventor's Signature	c/o Nisshin Engineering Co., Ltd., 14-1, Koamicho, Nihonbashi,
Residence Address	c/o Nisshin Engineering Co., Ltd., 14-1, RoamTene, Minetagette,
	Chuo-ku, Tokyo 103-8544 Japan
Citizenship	Japan
Post Office Address	Same as above
1 Ost Office / Idairess	
Full name of ninth joint inventor (if any) Masaaki Kubo	
	OCT. 1 2. 2000
Inventor's Signature	· M / I / A / M / I / Yr) — Data
Residence Address	c/o Nisshin Engineering Co., Ltd., 14-1, Koamicho, Nihonbashi,
Residence Address	Chuo-ku, Tokyo 103-8544 Japan
Citizantia	Japan
Citizenship	Same as above
Post Office Address	Danie all abort